

## REMARKS

The present application contains claims 1-7, 10-16, 31-38, 41, 44-46, and 48-56. Claims 1, 10, 31, 51, and 52 are independent.

### Examiner Interview

An Examiner Interview was held on March 25, 2009 between Supervisory Examiner Fan, Examiner Ghulamali; first named inventor Gin Liu; and representative for Applicants, Xiang Lu.

During the interview, Gin Liu provided a brief summary of the claimed invention, and the state of the technology at the time of the invention. Xiang Lu then discussed the claim limitations not taught or suggested by the Milbrandt reference, as set forth below in sections "Rejection under 35 U.S.C §102" and "Rejection under 35 U.S.C §103", and the history of this file.

It was agreed that the limitation "without an effect of a filter or an automatic gain controller" will be include in an amendment under 37 CFR 1.116 to further distinguish the present application from prior art.

### Rejection under 35 U.S.C §102

The Office rejected claims 1-7, 10-16, 31-38, 41, 44-46, and 48-56 under 35 U.S.C. §102 (e) as being anticipated by Milbrandt (U.S. Patent No. 7,242,761), hereinafter referred to as Milbrandt.

Applicants respectfully request reconsideration and withdrawal of this rejection in view of the following comments.

Regarding claims 1, 31 and 51, Milbrandt does not teach or suggest any of the claimed limitations.

1. "determining *at tip and ring terminals* of a modem input port, and storing in data registers on a *per bin basis channel a frequency response measurement and a noise*

*measurement measured at a first end of the DSL channel"*

The Office asserted that Milbrandt at column 2, lines 33-42 and 53-64 teaches this limitation.

Applicants respectfully disagree.

Milbrandt at column 2, lines 33-42 reads:

"The communication server comprises a communication device that communicates a signal using the first subscriber line. The system includes a memory coupled to the communication server that stores noise information and cross-channel-coupling information for the first subscriber line and the second subscriber line. A processor coupled to the memory determines the transmit power of the communication device based upon the noise information and the cross-channel-coupling information. "

And Milbrandt at column 2, lines 53-64 reads:

"Technical advantages of the present invention include a system for determining the data rate capacity of a twisted pair subscriber line that includes a communication server, a memory, and a processor. The memory stores attenuation information, noise information, or any other subscriber line information for a plurality of subscriber lines. The processor determines the data rate capacity of a selected subscriber line using the attenuation information and the noise information. In this respect, a data services provider in the system may pre-provision data rates for the subscriber line of a subscriber prior to activating data services for the communication equipment at the subscriber premises."

Even if the memory is interpreted as a data register as the Office did, which is an improper interpretation, the memory in Milbrandt is coupled to communication server 58 which is part of the central office 14 in Figure 1, and is not at tip and ring terminals as claimed in the present application. Further, there is no where in Milbrandt, not in column 2 or anywhere else, that the limitation "*a per bin basis channel a frequency response measurement and a noise measurement*" is taught or suggested.

2. "determining and storing in data registers on a *per bin basis a signal-to-noise measurement measured at the first end of the DSL channel; and transmitting the*

channel frequency response measurement, the noise measurement and the signal-to-noise measurement *from the first end to a second end* of the DSL channel"

The Office asserted that Milbrandt at column 4, lines 10-34, 48-67; column 5, lines 4-10, 20-30 and 45-67 and column , lines 1-12 teaches these limitations.

Applicants respectfully disagree.

Applicants note that Milbrandt at column 4, lines 10-34 discusses a communication system 10 in general; Milbrandt at column 4, lines 48-67 discusses the telephone 34 and the computer 32 including the modem 42 in subscriber 12; Milbrandt at column 5, lines 4-10 discusses modem 42; Milbrandt at column 5, lines 20-30 discusses the components of the computer 32 and Milbrandt at column 5, lines 45-67 discusses the subscriber line 16 in general. None of the quoted passages discuss the claimed limitations of the present application.

In order to properly anticipate Applicants' claimed invention under 35 U.S.C. §102, each and every element of the claimed invention must be found, either expressly described or under principles of inherency, in a single prior art reference. Milbrandt fails to meet this requirement, and provides no teaching that would have suggested the desirability of modification to include such elements. Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in ... the claim." See M.P.E.P. §2131 (8th Ed., Rev. 3, Aug. 2005), quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126,1236, 9 U.S.P.Q. 2d 191 3, 1920 (Fed. Cir. 1989). Finally, "[t]he elements must be arranged as required by the claim." MPEP 2131 (8th Ed.).

#### Rejection under 35 U.S.C §103

The Office rejected claim 10 under 35 U.S.C. §103(a) as being unpatentable over Milbrandt, the Office further rejected claims 44-46 under 35 U.S.C. §103 (a) as being unpatentable over Milbrandt in view of Zuranski et al., (U.S. Patent 6,263,077), hereinafter referred to as Zuranski.

As discussed in the above, Milbrandt does not teach or suggest the all the elements of the claimed invention.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In *re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." In *re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). The Examiner has not met his burden as at least the foregoing elements of the claim are not taught or suggest by the prior art.

Zuranski does not overcome the basic deficiencies of Milbrandt.

Applicants respectfully request withdrawal of this rejection under 35 U.S.C. §103(a).

Applicants respectfully request reconsideration of this application, based on the foregoing remarks.

Applicants respectfully request reconsideration of this application, based on the foregoing remarks. Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 625-3507. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

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